

WHAT IS CLAIMED IS:

1. A queues data model for interacting with intelligent agents that perform tasks on a computer network by relating a list of tasks to be performed by the intelligent agents with specific agent commands and agent command outputs, said  
5 data model comprising:

a plurality of agent queues entities that represent a list of tasks to be performed by the intelligent agents on a computer network;

a plurality of agent queues commands entities that relate the plurality of agent queues entities with specific agent commands and agent command outputs;

10 a plurality of agent command output entities that represent the agent command outputs; and

a plurality of agent commands entities that represent the specific agent commands to be executed by the intelligent agents.

2. The data model of claim 1, further comprising:

15 a plurality of agent queue mutex entities that serve as a locking mechanism to prevent an agent from attempting to execute commands on a busy device until the device is no longer busy.

3. The data model of claim 1, further comprising:

a plurality of agent command mutex entities that serve as a locking mechanism for preventing an agent from executing more than a single queue at a given time.

4. A data model for relating commands and command outputs of intelligent  
5 agents of a computer network with queues associated with the intelligent agents,  
comprising:

a plurality of agent queue command entities for relating agent queues to  
agent commands and agent command outputs;

- a plurality of agent queues entities representing said agent queues, which  
10 are a list of tasks to be completed by an intelligent agent on a computer network;

a plurality of agent command output entities representing said agent  
command outputs; and

a plurality of agent commands entities representing said agent commands.

5. The data model of claim 4, wherein the agents are prevented from  
15 executing more than a single queue at a given time by a plurality of agent  
command mutex entities, and wherein the agents are prevented from executing  
queues on devices that are already busy, thereby preventing a device from  
executing more than a single queue at a given time.

6. A queues data model for characterizing the interaction of queues entities, comprising:

- a plurality of agent queues entities;
- a plurality of agent queue commands entities;
- 5 a plurality of agent command output entities;
- a plurality of agent commands entities; and
- a plurality of agent command text entities.

7. The data model of Claim 6, further comprising a plurality of agent queue mutex entities that serve as a locking mechanism by signalling to agents that  
10 a particular device is currently busy.

8. The data model of Claim 6, further comprising a plurality of agent command mutex entities that serve as a locking mechanism to prevent an agent from attempting to accomplish more than one task at a time.

9. The data model of Claim 6, wherein said agent queues entities is used to  
15 indicate to agents a list of tasks to be performed and may optionally relate to multiple agent queues entities and may relate to said agent queue commands entities by a one-to-many relationship.

10. The data model of Claim 6, wherein said agent queue commands entities relate to said agent queues entities and said agent commands in many-to-one relationships and to said agent command output entities in a one-to-many relationship.

- 5           11. The data model of Claim 6, wherein said agent command text entities relate to said agent commands entities by a many-to-one relationship.

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